

H/415

0055811

Lionville Laboratory, Inc.  
PCB ANALYTICAL DATA PACKAGE FOR  
TNUHANFORD B01-104 H1415

DATE RECEIVED: 07/05/01

LVL LOT # :0107L229

CLIENT ID	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B129N0	001	WI	01LE0799	06/28/01	07/05/01	07/09/01
B129N1	002	WI	01LE0799	06/28/01	07/05/01	07/10/01
B129N2	003	WI	01LE0799	06/28/01	07/05/01	07/10/01
B129N3	004	WI	01LE0799	06/28/01	07/05/01	07/10/01
B129N4	005	WI	01LE0799	06/28/01	07/05/01	07/10/01
B129N5	006	WI	01LE0799	06/28/01	07/05/01	07/10/01

LAB QC:

PBLKJN	MB1	WI	01LE0799	N/A	07/05/01	07/10/01
PBLKJN	MB1 BS	WI	01LE0799	N/A	07/05/01	07/09/01
PBLKJN	MB1 BSD	WI	01LE0799	N/A	07/05/01	07/10/01

7/17/01

RECEIVED  
NOV 06 2001  
EDMC



## Analytical Report

**Client:** TNU HANFORD B01-104  
**LVL#:** 0107L229  
**SDG/SAF#:** H1415/B01-104

**W.O.#:** 11343-606-001-9999-00  
**Date Received:** 07-05-01

### PCB

The set of samples consisted of six (6) wipe samples collected on 06-28-01.

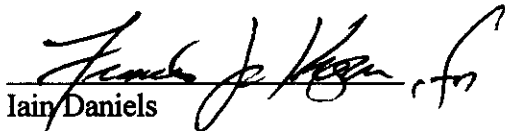
The samples and their associated QC samples were extracted on 07-05-01 and analyzed according to Lionville Laboratory OPs based on SW846, 3rd Edition procedures on 07-09,10-01. The extraction procedure was based on method 3540 and the extracts were analyzed based on method 8082 for Aroclors only.

The following is a summary of the QC results accompanying the sample results and a description of any problems encountered during their analyses:

1. The cooler temperature has been recorded on the chain-of-custody.
2. All required holding times for extraction and analysis have been met.
3. The samples and their associated QC samples received a sulfuric acid cleanup.
4. The method blank and blank spike duplicate contained Aroclor 1242 at a level above the reporting limit. Aroclor 1242 was also detected in several of the samples. A copy of the Sample Discrepancy Report (SDR) has been enclosed.
5. Three (3) of ten (10) obtainable surrogate recoveries were outside acceptance criteria. A copy of the SDR has been enclosed.
6. The obtainable blank spike recovery was outside acceptance criteria. A copy of the SDR has been enclosed.
7. Due to insufficient sample volume, matrix spike QC could not be performed on any samples in this data set.
8. Several samples required instrument dilutions due to the high concentrations of target analytes. Reporting limits have been adjusted to reflect the necessary dilutions.
9. All initial calibrations associated with this data set were within acceptance criteria.

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 11 pages.

10. All continuing calibration standards analyzed prior to sample extracts were within acceptance criteria.
11. I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy data package has been authorized by the laboratory Manager or a designee, as verified by the following signature.



Iain Daniels  
Deputy Laboratory Manager  
Lionville Laboratory Incorporated

pefr:\group\data\pest\07L-229.pcb

7/29/01  
Date

# Lionville Laboratory Sample Discrepancy Report (SDR)

SDR #: 016L291

Initiator: M. Kober Batch: 0107L229 Parameter: OPCB  
 Date: 7/11/01 Samples: all Matrix: wipe  
 Client: TNU Method: SW846/MCAWW/CLPI Prep Batch: 016E0799

## 1. Reason for SDR

a. COC Discrepancy ☐ Tech Profile Error ☐ Client Request ☐ Sampler Error on C-O-C  
☐ Transcription Error ☐ Wrong Test Code ☐ Other \_\_\_\_\_

## b. General Discrepancy

☐ Missing Sample/Extract ☐ Container Broken ☐ Wrong Sample Pulled ☐ Label ID's Illegible  
☐ Hold Time Exceeded ☐ Insufficient Sample ☐ Preservation Wrong ☐ Received Past Hold  
☐ Improper Bottle Type ☐ Not Amenable to Analysis

Note\*: Verified by [Log-In] or [Prep Group] (circle)...signature/date: \_\_\_\_\_

## c. Problem (Include all relevant specific results; attach data if necessary)

- ① Both the blank and blank spike duplicate are contaminated with AR 1242. Samples also contain AR 1242 (highest concentration is 170 billion ug/wipe), blank @ 1600 ug/wipe, and BSD @ 190,000 ug/wipe.  
 ② high surrogates in sample 001; TCX @ 128% and DCB @ 123%. This sample is clean of targets.  
 ③ high spike recovery in BS @ 205% (a spike check confirmed that the spike used was concentrated, and had been replaced)

## 2. Known or Probable Causes(s)

## 3. Discussion and Proposed Action

Other Description: \_\_\_\_\_

- ☐ Re-log  
☐ Entire Batch  
☐ Following Samples: \_\_\_\_\_  
☐ Re-leach  
☐ Re-extract  
☐ Re-digest  
☐ Revise EDD  
☐ Change Test Code to \_\_\_\_\_  
☐ Place On/Take Off Hold (circle)

Report

## 4. Project Manager Instructions...signature/date: \_\_\_\_\_

- ☐ Concur with Proposed Action  
☐ Disagree with Proposed Action; See Instruction  
☐ Include in Case Narrative  
☐ Client Contacted:  
 Date/Person \_\_\_\_\_  
☐ Add  
☐ Cancel

## 5. Final Action...signature/date: \_\_\_\_\_

Other Explanation: \_\_\_\_\_

- ☒ Verified re-[log][leach][extract][digest][analysis] (circle)  
☒ Included in Case Narrative  
☐ Hard Copy COC Revised  
☐ Electronic COC Revised  
☐ EDD Corrections Completed

When Final Action has been recorded, forward original to QA Specialist for distribution and filing.

## Route Distribution of Completed SDR

- ☒ X Initiator  
☒ X Lab General Manager: M. Taylor  
☒ X Project Mgr: Stone/Johnson/Haslett  
☒ X Technical Mgr: Wesson/Daniels  
☒ X QA (file): Alberts  
☐ Data Management: Feldman  
☐ Sample Prep: Beegle/Kiger

## Route Distribution of Completed SDR

- ☐ Metals: Beegle  
☐ Inorganic: Perrone  
☐ GC/LC: Kiger  
☐ MS: Rychlak/Layman  
☐ Log-in: Keppel  
☐ Admin: Soos  
☐ Other: \_\_\_\_\_



## GLOSSARY OF PESTICIDE/PCB DATA

### DATA QUALIFIERS

- U** = Indicates that the compound was analyzed for but not detected. The minimum detection limit for the sample (not the method detection limit) is reported with the U (e.g., 10U).
- J** = Indicates an estimated value. This flag is used in cases where a target analyte is detected at a level less than the lower quantification level. If the limit of quantification is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B** = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination.
- E** = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- I** = Interference.

### ABBREVIATIONS

- BS** = Indicates blank spike in which reagent grade water is spiked with the CLP matrix spiking solutions and carried through all the steps in the method. Spike recoveries are reported.
- BSD** = Indicates blank spike duplicate.
- MS** = Indicates matrix spike.
- MSD** = Indicates matrix spike duplicate.
- DL** = Indicates that recoveries were not obtained because the extract had to be diluted for analysis.
- NA** = Not Applicable.
- DF** = Dilution Factor.
- NR** = Not Required.
- SP** = Indicates Spiked Compound.



## GLOSSARY OF PESTICIDE/PCB DATA

- P = This flag is used for an PESTICIDE/PCB target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported on Form 1 and flagged with a "P".
- D = This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- C = This flag applies to a compound that has been confirmed by GC/MS.

## Lionville Laboratory, Inc.

PCBs by GC

Report Date: 07/16/01 20:10

RFW Batch Number: 0107L229

Client: TNUHANFORD B01-104 H1415 Work Order: 11343606001 Page: 1

2

Cust ID:		B129N0	B129N1	B129N2	B129N3	B129N4	B129N5
Sample Information	RFW#:	001	002	003	004	005	006
	Matrix:	WIPE	WIPE	WIPE	WIPE	WIPE	WIPE
	D.F.:	1.00	20000	100000	100000	1.00	1.00
	Units:	ug/WIPE	ug/WIPE	ug/WIPE	ug/WIPE	ug/WIPE	ug/WIPE
Surrogate:		Decachlorobiphenyl	123 * %	D %	D %	D %	113 %
		Tetrachloro-m-xylene	128 * %	D %	D %	D %	100 %
			=====fl=====	=====fl=====	=====fl=====	=====fl=====	=====fl=====
Aroclor-1016			500 U	0.10E+08 U	0.50E+08 U	0.50E+08 U	500 U
Aroclor-1221			500 U	0.10E+08 U	0.50E+08 U	0.50E+08 U	500 U
Aroclor-1232			500 U	0.10E+08 U	0.50E+08 U	0.50E+08 U	500 U
Aroclor-1242			500 U	0.26E+08	0.17E+09	0.15E+09	500 U
Aroclor-1248			500 U	0.10E+08 U	0.50E+08 U	0.50E+08 U	500 U
Aroclor-1254			500 U	0.10E+08 U	0.50E+08 U	0.50E+08 U	500 U
Aroclor-1260			500 U	0.10E+08 U	0.50E+08 U	0.50E+08 U	500 U

Cust ID:		PBLKJN	PBLKJN BS	PBLKJN BSD
Sample Information	RFW#:	01LE0799-MB1	01LE0799-MB1	01LE0799-MB1
	Matrix:	WIPE	WIPE	WIPE
	D.F.:	1.00	1.00	50.0
	Units:	ug/WIPE	ug/WIPE	ug/WIPE
Surrogate:		Decachlorobiphenyl	123 * %	110 %
		Tetrachloro-m-xylene	108 %	102 %
			=====fl=====	=====fl=====
Aroclor-1016			500 U	25000 U
Aroclor-1221			500 U	25000 U
Aroclor-1232			500 U	25000 U
Aroclor-1242			1600	190000
Aroclor-1248			500 U	25000 U
Aroclor-1254			500 U	205 * %
Aroclor-1260			500 U	25000 U

JLW 7/16/01

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not reported. NS= Not spiked.  
 %= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. \*= Outside of EPA CLP QC

0107L229

## Custody Transfer Record/Lab Work Request Page 1 of 1

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS



Client <u>TNU-Hanford B01-104</u>				Refrigerator # <u>4</u>															
Est. Final Proj. Sampling Date _____				#/Type Container		Liquid													
Project # <u>11343-C606-001-9999-00</u>						Solid		<u>16x</u>											
Project Contact/Phone # _____				Volume		Liquid													
Lionville Laboratory Project Manager <u>AS 3</u>						Solid		<u>120</u>											
QC Spec <u>Del Std</u> TAT <u>7 day</u>				Preservatives															
Date Rec'd <u>7-5-01</u> Date Due <u>7-12-01</u>				ANALYSES REQUESTED →		ORGANIC					INORG								
						VOA		BNA		Pest/PCB		Herb		Metal		CN			
Lionville Laboratory Use Only																			
MATRIX CODES: S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids L - EP/TCLP Leachate WI - Wipe X - Other F - Fish		Lab ID	Client ID/Description	Matrix OC Chosen (✓)		Matrix	Date Collected	Time Collected											
				MS	MSD														
						<u>WI</u>													
		<u>001</u>	<u>B129NO</u>			<u>SO</u>	<u>6/28/01</u>	<u>-</u>											
		<u>002</u>	<u>1</u>			<u>1</u>	<u>1</u>	<u>1</u>											
		<u>003</u>	<u>2</u>			<u>1</u>	<u>1</u>	<u>1</u>											
		<u>004</u>	<u>3</u>			<u>1</u>	<u>1</u>	<u>1</u>											
		<u>005</u>	<u>4</u>			<u>1</u>	<u>1</u>	<u>1</u>											
		<u>006</u>	<u>5</u>			<u>1</u>	<u>1</u>	<u>1</u>											

Special Instructions: Saf B01-104Run Matrix QC

## DATE/REVISIONS:

1. Samples rec'd 7/3/01 @ 09302. COC rec'd 7/5/01 @ 1015

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

## Lionville Laboratory Use Only

Samples were:

1) Shipped ☒ or  
Hand Delivered \_\_\_\_\_

Airbill # \_\_\_\_\_

4235795455352) Ambient or Chilled3) Received in Good  
Condition ☒ or N4) Samples  
Properly Preserved ☒ or N5) Received Within  
Holding Times ☒ or N6) Received Within  
Holding Times ☒ or N

Tamper Resistant Seal was:

1) Present on Outer  
Package ☒ or N2) Unbroken on Outer  
Package ☒ or N3) Present on Sample  
☒ or N4) Unbroken on  
Sample ☒ or NCOC Record Present  
Upon Sample Rec'l ☒ or NCooler  
Temp. 6.5 °C

Relinquished by	Received by	Date	Time
<u>FedEx</u>	<u>J. Koppel</u>	<u>7-3-01</u>	<u>0930</u>
<u>Ted E.</u>	<u>TTC</u>	<u>7-5-01</u>	<u>1015</u>

Relinquished by	Received by	Date	Time
<u>COMPOSITE</u>	<u>ORIGINAL</u>		

Discrepancies Between  
Samples Labels and  
COC Record? Y or ☒ N

NOTES:



<b>Bechtel Hanford Inc.</b>		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>				<b>B01-104-01</b>		Page 1 of 1	
Collector Brasker, William		Company Contact Duane Jacques		Telephone No. 373-5299		Project Coordinator TRENT, SJ		Price Code 9J      Data Turnaround 7 Days	
Project Designation 202-S Light Ballast Fire Characterization		Sampling Location 202-S		SAF No. B01-104		Air Quality <input type="checkbox"/>			
Ice Chest No. ERC 99-065 / SNL 442		Field Logbook No. NA		COA BREDOX2W28		Method of Shipment Fed Ex			
Shipped To TMA/ECRA		Offsite Property No. A010428		Bill of Lading/Air Bill No. 42357954-5524/5535					
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> Samples did not originate in radiological controlled area. No (total) activity associated with sample/samples. Special Handling and/or Storage			Preservation Cool AC Type of Container G No. of Container(s) 1 Volume 120mL		Samples stored in Ref. # 2B at the 3728 Shipping Facility on 6/29/01. Collector not available to relinquish samples on 7/2/01 for shipment.				
<b>SAMPLE ANALYSIS</b>			PCBs - 8082		I.H. SAMPLE #				
Sample No.	Matrix *	Sample Date	Sample Time						
B129N0	OTHER SOLID	6.28.01	NA	X		(6-28-01-01)			
B129N1	OTHER SOLID	6.28.01	NA	X		(6-28-01-02)			
B129N2	OTHER SOLID	6.28.01	NA	X		(6-28-01-03)			
B129N3	OTHER SOLID	6.28.01	NA	X		(6-28-01-04)			
B129N4	OTHER SOLID	6.28.01	NA	X		(6-28-01-05)			
<b>CHAIN OF POSSESSION</b>		<b>Sign/Print Names</b>			<b>SPECIAL INSTRUCTIONS</b>				
Relinquished By/Removed From		Date/Time	Received By/Stored In		** Laboratory is to report results on a per sample basis. Samples Collected & Documented for Custody on I.H. COC (page 3 & 4). Samples Relinquished to ERC-AFS, New COC & Sample # Generated for RECRA, OFFSITE ANALYSIS (page 1 & 2)				
S. GALE		6/29/01 1340	REF 2B						
Relinquished By/Removed From		Date/Time	Received By/Stored In						
R. J. Thore		7.2.01	R. J. Thore						
Relinquished By/Removed From		Date/Time	Received By/Stored In						
Fed Ex		7.5.01 1015	Thore						
Relinquished By/Removed From		Date/Time	Received By/Stored In						
Relinquished By/Removed From		Date/Time	Received By/Stored In						
<b>LABORATORY SECTION</b>		Received By		Title		Date/Time			
<b>FINAL SAMPLE DISPOSITION</b>		Disposal Method		Disposed By		Date/Time			

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B01-104-01		Page 2		
Collector Brasker, William		Company Contact Duane Jacques		Telephone No. 373-5299		Project Coordinator TRENT, SJ		Price Code 9J      Data Turnaround		
Project Designation 202-S Light Ballast Fire Characterization		Sampling Location 202-S		SAF No. B01-104		Air Quality <input type="checkbox"/>		7 Days		
Ice Chest No. ERC 99-065/SMI-442		Field Logbook No. NA		COA BREDOX2W28		Method of Shipment Fed Ex				
Shipped To TMA/RECRA		Offsite Property No. A010428				Bill of Lading/Air Bill No. 42357954-5524-5535				
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> PCB Samples did not originate in radiological controlled area. No total activity associated with sample/samples. Special Handling and/or Storage: <i>6-29-01</i>			Preservation	Cool AC						
			Type of Container	G						
			No. of Container(s)	1						
			Volume	120mL						
					PCBs - 8082					
SAMPLE ANALYSIS										
Sample No.		Matrix *		Sample Date		Sample Time		I.H. SAMPLE #		
B129N5		OTHER SOLID		6-28-01		NA		X      (6-28-01-06)		
CHAIN OF POSSESSION				Sign/Print Names		SPECIAL INSTRUCTIONS				
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time		** Laboratory is to report results on a per sample basis.  Matrix * S=Soil SB=Sludge SO=Solid SL=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WL=Wipe L=Liquid V=Vegetation X=Other		
S. GALE		6-29-01 1340		REF ZB		6-29-01 1340				
R. J. 2B		3-7-78 7-2-01		R. J. R. Thore		7-2-01				
R. J. R. Thore		7-2-01		FEDEx						
FIDEE		7-5-01 1015		J. K. Apple		7-5-01 1015				
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time				
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time				
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time				
LABORATORY SECTION		Received By		Title		Date/Time				
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time				

February 12, 1999

Figure 1. Sample Check-in List

Date/Time Received: 7/3/01 / 0930 (Samples)SDG#: 0107L229Work Order Number: -SAF# B01-104Shipping Container ID: SML-445Chain of Custody # B01-104-01

1. Custody Seals on shipping container intact? Yes ☒ No ☐
2. Custody Seals dated and signed? Yes ☒ No ☐
3. Chain-of-Custody record present? Yes ☒ No ☒ *see Below*
4. Cooler temperature 6.5°C *7501*
5. Vermiculite/packing materials is Wet ☐ Dry ☒
6. Number of samples in shipping container: 60
7. Sample holding times exceeded? Yes ☐ No ☒

8. Samples have:
- ☒ tape ☐ hazard labels
- ☐ custody seals ☐ appropriate sample labels

9. Samples are:
- ☒ in good condition ☐ leaking
- ☐ broken ☐ have air bubbles

10. Were any anomalies identified in sample receipt? Yes ☒ No ☐
11. Description of anomalies (include sample numbers):

Samples were rec'd on 7-3-01 @ 0930 w/o any COC's/paperwork

COC was rec'd on 7-5-01 @ 1015

Sample Custodian/Laboratory: Thoppil / LULI Date: 7-5-01Telephoned to:  On  By